
HOUSE BILL 1981

State of Washington

64th Legislature

2015 Regular Session

By Representative Pollet

Read first time 02/04/15. Referred to Committee on Education.

1 AN ACT Relating to a pilot project on elementary science
2 education programs; adding new sections to chapter 28A.630 RCW; and
3 providing an expiration date.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 NEW SECTION. **Sec. 1.** The legislature finds that a school
6 district program of intentional high quality support for teachers is
7 necessary to ensure that every elementary student receives strong
8 science instruction. The legislature also finds that elementary
9 students exposed to scientific inquiry and theories, and mentored or
10 coached teacher programs will be better prepared to succeed in the
11 sciences later in their schooling, and as part of the workforce.
12 Therefore, a pilot project that develops a system of support for
13 teachers and students must be implemented to improve teaching quality
14 and student achievement in the sciences.

15 NEW SECTION. **Sec. 2.** Unless the context clearly requires
16 otherwise, the definitions in this section apply throughout this
17 section and sections 3 through 6 of this act.

18 (1) "Free or reduced-price lunch" means lunch served by a school
19 district that qualifies for federal reimbursement as free or reduce-
20 price lunch under the national school lunch program.

1 (2) "Initial use class" means a class for elementary science
2 teachers that describes how to use science kits and is facilitated by
3 a lead teacher.

4 (3) "Lead teacher" means a master science teacher who facilitates
5 an initial use class.

6 (4) "Master science teacher" means a certificated teacher
7 experienced in teaching K-5 inquiry-based science subjects, having
8 the qualifications determined by the science advisory board, and
9 released from the classroom to provide instruction, training, and
10 mentoring in science education to other elementary school teachers,
11 including preparation and use of appropriate curriculum and
12 experiential science education materials.

13 (5) "Materials center" means the district staff and resources
14 used to create, deliver, and refurbish science kits.

15 (6) "Project" means the elementary science education program
16 pilot project described in section 5 of this act.

17 (7) "Project administrator" means the district staff member
18 responsible for overseeing the project in each district, hiring and
19 evaluating the master science teachers, and composing annual reports.

20 (8) "Science kit" means all the materials needed for a science
21 project or activity.

22 (9) "Title I funds" means federal funds provided to elementary
23 and secondary schools with high numbers or high percentages of
24 children from low-income families to help ensure that all children
25 meet state academic standards.

26 NEW SECTION. **Sec. 3.** (1) The elementary science education
27 program pilot project is created. To participate in the project, a
28 school district in the state may submit an application to the office
29 of the superintendent of public instruction as provided in section 4
30 of this act.

31 (2) The purpose of the project is to provide elementary students
32 with strong science instruction by creating a system of support for
33 teachers and students. This system of support has four key elements:

- 34 (a) Strong administrative and community support;
- 35 (b) Ongoing, high quality professional development;
- 36 (c) High quality curriculum materials and materials support; and
- 37 (d) Assessment of students and evaluation of project.

1 NEW SECTION. **Sec. 4.** (1) By ninety days after the effective
2 date of this section, subject to funds appropriated specifically for
3 this purpose, the office of the superintendent of public instruction
4 shall develop a competitive application process as described in this
5 section for the project.

6 (2) The office of the superintendent of public instruction shall
7 develop requirements for applications to include:

8 (a) The district's rationale for its selection;

9 (b) A list of administrators, teachers, and community members who
10 are interested in becoming members of a science advisory board;

11 (c) A preliminary plan for providing high quality professional
12 development to elementary science teachers; and

13 (d) A plan for what science education curriculum and materials
14 the district will use and how the district will provide for mentoring
15 and instructing elementary school teachers in the use of the
16 curriculum and materials.

17 (3) A school district or educational service district seeking
18 approval to participate in the project shall submit an application of
19 intent to the office of the superintendent of public instruction by
20 one hundred fifty days after the effective date of this section.

21 (4) No later than one hundred eighty days after the effective
22 date of this section, the office of the superintendent of public
23 instruction shall review the applications and select three applicants
24 for participation in the project:

25 (a) A large urban school district with greater than twenty-five
26 thousand students;

27 (b) A rural district; and

28 (c) An urban district with a high percentage of students
29 receiving or eligible to receive free or reduced-price lunches, and
30 schools that receive or are eligible to receive federal Title I
31 funds.

32 (5) Subject to funds appropriated specifically for this purpose,
33 the office of the superintendent of public instruction shall allocate
34 grants to the selected applicants to be used for development and
35 implementation of an elementary science education program under
36 section 5 of this act.

37 NEW SECTION. **Sec. 5.** The project must:

38 (1) Ensure strong administrative and community support by
39 establishing a science advisory board for the district school board

1 and district superintendent that includes university science
2 education experts; community and industry scientists; representation
3 from the school board, assistant superintendent, and executive
4 director of the teaching and learning division of the office of the
5 district superintendent; the district science program manager; the
6 master science teachers; teacher leaders; representation from the
7 teachers' union; and parents. The advisory board must:

8 (a) Provide leadership through effective collaboration;

9 (b) Develop a common, shared vision and ensure that the program
10 remains focused on that vision while aligning with secondary science
11 content and next generation science standards; and

12 (c) Define the qualifications of a master science teacher and
13 oversee the hiring and evaluation of the master science teachers;

14 (2) Support student learning and teacher instruction by:

15 (a) Using grade-level specific, high quality curriculum and
16 materials supports developed by master science teachers in
17 collaboration with university science education experts through
18 repeated field testing in diverse locations; and

19 (b) Maintaining a district materials center;

20 (3) Assess student learning by supplying teachers with formative
21 science kit assessments developed by the master science teachers; and

22 (4) Provide ongoing, high quality professional development that
23 includes:

24 (a) Highly qualified professional development providers who
25 shall:

26 (i) Adapt the grade-specific science curriculum to the next
27 generation science standards;

28 (ii) Ensure that quality professional development is offered to
29 support teachers' use of the curriculum and science kits;

30 (iii) Develop the capacity of teachers at various levels of
31 experience and knowledge;

32 (iv) Recruit, mentor, and support the lead teachers;

33 (v) Make instructional decisions based on current data, research,
34 and best practices;

35 (vi) Manage the logistics, content, and materials for initial use
36 classes and lead teacher meetings; and

37 (vii) Work with outside experts to develop the skills and
38 knowledge necessary to implement this subsection;

39 (b) Recognition of teachers' need for a curriculum connected to
40 the next generation science standards, prepared materials, and

1 instruction on the content, pedagogy, and inquiry skills for the
2 science units;

3 (c) Improvements based on teacher feedback and field-testing of
4 professional development content, instructional materials, and
5 instructional guides;

6 (d) Multiple types of opportunities over time;

7 (e) Instruction on the benefits of continuity;

8 (f) Science-writing and teacher leadership courses based on the
9 science-writing program developed by the Seattle public schools; and

10 (g) Additional compensation for teachers who attend professional
11 development opportunities outside of work hours.

12 NEW SECTION. **Sec. 6.** (1) Each district participating in the
13 project must be evaluated by outside evaluators through observations,
14 surveys, and interviews to ensure that the steps taken to implement
15 the project are productive and achieve the purpose described in
16 section 3 of this act. By August 31, 2017, the evaluator shall
17 provide formative feedback to the master science teachers and project
18 administrators and provide the superintendents, school boards, and
19 advisory boards with evaluation reports.

20 (2) Each project administrator must submit a biennial progress
21 report to the office of the superintendent of public instruction
22 beginning October 31, 2017. The report must describe:

23 (a) The vision developed by the science advisory board;

24 (b) The qualifications of a master science teacher developed by
25 the advisory board;

26 (c) The progress of the master science teachers in developing or
27 using a grade-level specific science curriculum and a professional
28 education program;

29 (d) Best practices developed and lessons learned;

30 (e) A summary of student performance in the project compared to
31 student performance before implementation of the project;

32 (f) Suggestions for expanding best practices to a larger scale;
33 and

34 (g) The method the district uses to measure student growth in
35 learning science concepts.

36 (3) By December 31, 2017, the office of the superintendent of
37 public instruction shall provide to the appropriate committees of the
38 legislature a report that compiles and summarizes the reports from
39 each district in a standard format and a recommendation whether the

1 project should be modified, continued, and expanded to include other
2 elementary schools in the state, or expanded to include middle and
3 high schools.

4 (4) If the project is continued, the office of the superintendent
5 of public instruction shall submit biennial recommendations and
6 reports.

7 NEW SECTION. **Sec. 7.** This act expires June 30, 2018.

8 NEW SECTION. **Sec. 8.** Sections 1 through 7 of this act are each
9 added to chapter 28A.630 RCW.

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